UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box. 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

34431

7590

08/30/2005

HANLEY, FLIGHT & ZIMMERMAN, LLC 20 N. WACKER DRIVE SUITE 4220 CHICAGO, IL 60606 EXAMINER

LEE, GRANVILL D

ART UNIT PAPER NUMBER

2891

DATE MAILED: 08/30/2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/749,650	12/30/2003	Tae-Hee Park	20067/OPP031479US	9404	

TITLE OF INVENTION: METHODS OF FORMING METAL LINES IN SEMICONDUCTOR DEVICES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$1700	11/30/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(571) 273-2885 or Fax

INSTRUCTIONS: This fo appropriate. All further con indicated unless corrected maintenance fee notification	below or directed otherwise	smitting the ISSU Patent, advance or in Block 1, by (a	TE FEE and PU ders and notific) specifying a	JBLICATION FEE (if n cation of maintenance fee new correspondence addr	equired). Blocks 1 through 5 ses will be mailed to the current ess; and/or (b) indicating a sep	should be completed where correspondence address as arate "FEE ADDRESS" for
	CE ADDRESS (Note: Use Block 1 for 590 08/30/2005	any change of address)		Fee(s) Transmittal. papers. Each addit	of mailing can only be used for This certificate cannot be used ional paper, such as an assignm cate of mailing or transmission.	for any other accompanying
	HT & ZIMMERMA DRIVE	N, LLC			Certificate of Mailing or Tran at this Fee(s) Transmittal is bein ce with sufficient postage for fir Mail Stop ISSUE FEE address JSPTO (571) 273-2885, on the	smission g deposited with the United stst class mail in an envelope s above, or being facsimile date indicated below.
						(Depositor's name)
						(Signature)
						(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED I	NVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,650	12/30/2003		Tae-Hee	Park	20067/OPP031479US	9404
	METHODS OF FORMING M			CTOR DEVICES		
APPLN. TYPE	SMALL ENTITY	ISSUE F	EE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400)	\$300	\$1700	11/30/2005
EXAM	MINER	ART UN	IT .	CLASS-SUBCLASS		
LEE, GRA	ANVILL D	2891		438-669000	_	
"Fee Address" indica: PTO/SB/47; Rev 03-02 (Number is required. 3. ASSIGNEE NAME AND PLEASE NOTE: Unless	13/CFR 3.11. Completion	ation form e of a Customer E PRINTED ON T elow, no assignee of this form is NO	(1) the name or agents OF (2) the name registered at 2 registered listed, no nate of the PATENT (data will appear a substitute for	ron the natent If an ass	as a member a 2and a so fup to a signee is identified below, the o	document has been filed for
Please check the appropriate	e assignee category or catego	ries (will not be pri	inted on the pate	ent): 🗖 Individual 🕻	Corporation or other private gr	oup entity Government
4a. The following fee(s) are	enclosed:	46	. Payment of Fe	œ(s):		
Issue Fee	0 25 12			the amount of the fee(s) is		
Advance Order - # of	mall entity discount permitte	ed)		credit card. Form PTO-2	038 is attached. y charge the required fee(s), or	aradit anu assamant ta
			Deposit Accou	nt Number	(enclose an extra c	copy of this form).
	(from status indicated above MALL ENTITY status. See .		☐ b. Applican	t is no longer claiming SM	MALL ENTITY status. See 37 C	FR 1 27(e)(2)
The Director of the USPTO NOTE: The Issue Fee and P interest as shown by the reco	is requested to apply the Issu ublication Fee (if required) v ords of the United States Pate	ne Fee and Publicate vill not be accepted and Trademark	tion Fee (if any)		ously paid issue fee to the applic registered attorney or agent; or t	
Authorized Signature				Date		
				-	ion No.	
This collection of informatic an application. Confidential submitting the completed ap this form and/or suggestions Box 1450, Alexandria, Virg.	on is required by 37 CFR 1.3 ity is governed by 35 U.S.C. pplication form to the USPT is for reducing this burden, shinia 22313-1450. DO NOT	11. The informatio 122 and 37 CFR O. Time will vary lould be sent to the SEND FEES OR C	n is required to 1.14. This collect depending upon Chief Informa COMPLETED F	obtain or retain a benefit ction is estimated to take n the individual case. Any tion Officer, U.S. Patent a ORMS TO THIS ADDR	by the public which is to file (an 12 minutes to complete, including comments on the amount of the trademark Office, U.S. Dependent of the commissioner ESS. SEND TO: Commissioner of the	d by the USPTO to process) ng gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Boy, 1450

Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/749,650	12/30/2003	Tae-Hee Park	20067/OPP031479US	9404	
34431	7590 08/30/2005	EXAMINER			
HANLEY, FL	IGHT & ZIMMERMA	LEE, GRANVILL D			
SUITE 4220	CDRIVE		ART UNIT	PAPER NUMBER	
CHICAGO, IL	50606		2891		
			DATE MAILED: 08/30/2005		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 43 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 43 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571) 272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.